

IN THE SPECIFICATION:

Please delete the paragraph beginning at page 1, line 11, and ending at page 1, line 22, and insert the following new paragraph therefore:

-- The present invention is directed to a language instruction tool and, more particularly, to a computer-based system and method employing an improved "speaking words" interface for teaching and promoting early or emergent reading and/or foreign language acquisition. Although the present invention will be described primarily herein in reference to an application designed to run primarily from a browser as a set of hypertext markup language (HTML), or World Wide Web (Web) documents or pages, it will be recognized that the present invention can also be embodied as other markup language documents or run as a standalone application, such as a Macromedia Flash FLASH (SWF) file on the user's desktop. Thus, the present invention may be accessed directly from the Internet or intranet, or can be distributed to users by any computer distribution mechanism, including CD-ROM and DVD, and the like.--

Please delete the three paragraphs beginning at page 8, line 3, and ending at page 8, line 27, and insert the following new paragraphs therefore:

-- The present invention is preferably implemented using Macromedia's Flash FLASH application; although other implementations are also contemplated, such as JavaScript JAVASCRIPT and Java JAVA. Each speaking words web page in accordance with this teaching consists of the one or more HTML pages **112** and one or more associated Flash FLASH format (SWF) files **114**.

-- Each of the web pages **112** includes one or more SWF files **114**. The SWF files are contained in the HTML pages **112** as embedded data, e.g., as an object and/or embedded file. When the user views the speaking words pages **112**, the HTML pages and associated SWF files are downloaded from the server **110** to the user's client computer **112**. In the preferred embodiment, the Flash FLASH

Player 124 is installed in the browser 122 or on the client computer 112 desktop to provide audio playback of the speaking words pages 112.

-- Preferably, the speaking word files 112 of the present invention are adapted to provide universal or near universal browser support, although it is also contemplated that certain implementations may be targeted to run in a specific browser, such as Microsoft's Internet Explorer INTERNET EXPLORER browser (e.g., version 5.5 or higher). Additionally, the speaking words files 112 may be implemented in a host of other programming languages (such as Java JAVA) and/or run as a stand-alone application, or client/server or thin client application. Likewise, the present invention may be implemented using an audio player other than the Flash FLASH player. Also, it is contemplated that other markup languages or future versions of the HTML specification may support sound directly, in which case it is unnecessary to implement the sound files as embedded data and that the sound file would be played under direct markup language support, for example, new HTML tags to play audio.- -

Please delete the two paragraphs beginning at page 19, line 1, and ending at page 19, line 11, and insert the following new paragraphs therefore:

-- An exemplary process to develop a speaking words page in accordance with the present invention includes four distinct tasks: (1) creating JPEG images; (2) recording, transferring, and editing sound; (3) creating Flash FLASH SWF files; and (4) coding HTML pages. An exemplary method 1000 for generating or developing a speaking words file in accordance with the present invention is outlined in FIGURE 10.

-- Although the present invention is described by way of reference to some of the presently preferred implementations, it will be appreciated that the described process is also amenable to other computer applications providing sound support and for creating sound and images on the Web, such as JavaScript JAVASCRIPT, Java JAVA, and so forth.- -

Please delete the paragraph beginning at page 19, line 23, and ending at page 20, line 4, and insert the following new paragraph therefore:

-- The image consists of a background and the text of the words the user will hear. Alternatively, the text of the words may be contained in the final markup language document, rather than the image file, in which case the background consists only of the image representation. The background may be, for example, one or more scanned or digital photographs, scanned or digital artwork, or any combination thereof. Typically, the background has a thematic relationship to the text, or, the text and background may combine to tell a story. Designers will be concerned with size and placement of text, font type and color, and how the text interacts with the background, as well as the dimensions of the completed JPEG. It will be recognized that, although a JPEG image format is used for the background image in the preferred Flash FLASH implementation, alternative image formats may also be used and/or that the JPEG format may be superceded in the future.--

Please delete the paragraph beginning at page 20, line 8, and ending at page 20, line 16, and insert the following new paragraph therefore:

-- The background image is converted, if necessary, to the JPEG file format at step **1016**. It will be recognized that the page may be drawn or composed entirely in the digital domain and, in such case, scanning step **1012** may be omitted. It will be recognized that any computer drawing or graphic application may be used to create the JPEG image, including the Flash FLASH application itself. Where the JPEG is created within Flash FLASH, it does not need to be imported into Flash FLASH in step **1032**, below. However, the use of a graphic editing application such as Adobe Photoshop PHOTOSHOP or Illustrator ILLUSTRATOR will generally provide greater control over the background and produce higher quality images.--

Please delete the paragraph beginning at page 21, line 11, and ending at page 21, line 16, and insert the following new paragraph therefore:

-- The sound can be recorded onto an analog recording medium, such as analog tape, and subsequently transferred to a digital format. Exemplary digital file formats include but are not limited to 16-bit PCM, Direct Stream Digital (DSD) super audio CD format, waveform audio (WAV) format, G.711 mu-law, AIFF, XSNG, MPEG, MP3 audio, IMA/DVI ADPCM, GSM 06.10, InterWave VSC112, ~~TrueSpeech~~ TRUESPEECH 8.5, ~~RealAudio~~ REALAUDIO, and other digital audio formats. --

Please delete the paragraph beginning at page 21, line 23, and ending at page 21, line 30, and insert the following new paragraph therefore:

-- If the digital sound data is not already in MP3 audio format, any computer sound application can be used to transfer it into this format. In the preferred Flash FLASH implementation, all of the words that make up a given phrase or sentence that are to be separately playable are placed in a single MP3 file; thus there will be as many of these files as there are phrases or sentences. Each fluent and bilingual word (where the text appears on screen as a single word) or, in the case of multiword phrases or sentences, each fluent and bilingual phrase or sentence is placed in its own MP3 file. --

Please delete the paragraph beginning at page 22, line 1, and ending at page 22, line 4, and insert the following new paragraph therefore:

-- It will be recognized that, although the MP3 audio format is employed for the sound files in the preferred Flash FLASH implementation, alternative audio formats may also be used and/or that the MP3 format may be superceded in the future. --

Please delete the three paragraphs beginning at page 22, line 6, and ending at page 22, line 20, and insert the following new paragraphs therefore:

-- To achieve rollover sound, each playable text word on the web page is enclosed in a "hot" or sensitive region **318** (see, e.g., FIGURE 3) that traps MouseOver events. In the preferred embodiment, the rollover sound is implemented using the Flash FLASH application because at this time Flash FLASH guarantees universal browser support. However, this effect may also be implemented by JavaScript JAVASCRIPT, Java JAVA, Flash FLASH, and various other Web design applications.

-- As stated above, in the preferred Flash FLASH implementation, all words of a multiword phrase or sentence are contained as distinct and separate words in a single digital sound file where each separate and distinct word is selectively and individually playable.

-- In the Flash FLASH application, a Flash FLASH document is created (step **1036**), which is sometimes referred to as a "movie." At step **1032**, the JPEG image is imported to the Flash FLASH document (if the JPEG was not created within Flash FLASH) and the MP3 audio files are imported into the document library. The JPEG is placed on one layer of the document and a separate layer is created for sound.--

Please delete the paragraph beginning at page 23, line 6, and ending at page 23, line 11, and insert the following new paragraph therefore:

-- The Flash FLASH document or "movie" is tested at step **1040**. After testing the document, one or more SWF files are published at step **1044**, which may be embedded in an HTML page at step **1056**. Multiple SWF files may be published from the same document or movie to produce a set of SWF files in which different fluency (step **1048**) and bilingual (step **1052**) features are turned on or off.--

Please delete the paragraph beginning at page 23, line 13, and ending at page 23, line 27, and insert the following new paragraph therefore:

-- Although the present invention is discussed by way of reference to HTML documents, it will be recognized that the present invention may be adapted to other markup languages and standards as currently exist or as may be promulgated in the future. Following the initial design of the web page (step 1004), the developer places one or more SWF files in an HTML file (step 1056) using the embedded data tags, <OBJECT> and <EMBED>. These tags cause the server to download the SWF file(s) along with the HTML file onto the client browser. The tags also cause the client browser to call the Flash FLASH player to play the SWF files. Program instructions, such as JavaScript JAVASCRIPT or Java JAVA, may be used within the HTML file to load SWF files dynamically, depending on user interaction with the web page. Navigation features may also be added to the HTML file so that users can move from one speaking words web page to another. Text instruction for using the speaking words pages may also be provided in the HTML file and presented to the user, e.g., in the user's native language in the case of a bilingual or foreign language instruction implementation.- -

Please delete the paragraph beginning at page 24, line 22, and ending at page 25, line 4, and insert the following new paragraph therefore:

-- A sound-only SWF file is created in the Flash FLASH application by open a new movie and importing all of the AIFF sound files into its library. A layer for sound is created on the main timeline. To make the audio that will be played on mouse rollover, a new movie clip with three layers is created: labels, actions, and sound. A stop action is inserted on the first frame of the actions layer. A label is added to frame 5 of the labels layer; this label represents the "start" state of a sound. A stop sync sound command is added to frame 5 in the sound layer. One of the spoken word sentences is added to frame 6 of the sound layer. In the sound panel, Effect is set to "None," Sync to "Start," and Loop to "0." In the Sound Editing

Dialogue Box, only the first word in the spoken word sentence is selected and the Flash FLASH file is saved. Using the same procedure, movie clips are created for each word in the sentence. This is done for each word in each spoken word sentence. The process may be streamlined by duplicating movie clips and simply replacing the old sound with a new one.--

Please delete the three paragraphs beginning at page 25, line 12, and ending at page 26, line 8, and insert the following new paragraphs therefore:

-- An instance of each movie clip is placed on the stage. Each instance is named when placed. This name is used by the JavaScript JAVASCRIPT code to pass the sound in the Flash FLASH player. Finally, a SWF file is generated by using the Publish command in Flash FLASH.

-- Next, the HTML file is created. The HTML file contains a JavaScript JAVASCRIPT function that passes the appropriate sound to the Flash FLASH player and tells it to play. Spoken words are activated by a mouse rollover event. Translation/fluency sentences are activated by a mouse click event. If the text words have been incorporated into the image file, the JavaScript JAVASCRIPT function to play the sound is called from a MAP statement. The MAP statement specifies the regions in which a rollover or click will play a particular sound instance. In the MAP statement, the developer must include the point coordinates that define an enclosing rectangle around the specific word to be played. If the image is background only and the text words exist in the HTML markup, the JavaScript JAVASCRIPT function to play the sound is called from an HREF statement. In this case, it is not necessary to specify an enclosing rectangle because the word is automatically sensitive.

-- The present invention may also be employed as a standalone SWF file. A background containing an image and on-screen text representations of the words to be spoken and corresponding audio files are created as described above. Using the Flash FLASH application, a new movie file is created with two layers on its main timeline: JPEG and sound. The JPEG layer is selected and the JPEG file

is imported, positioning it at the center of the stage. Then, the sound files are imported into the library. A button is created for each spoken word, and an optional button is created for each multiword phrase or sentence and for each standalone word that is not part of a multiword phrase or sentence. Likewise, an optional button for fluent playback of each multiword phrase or sentence in the on-screen language may also be provided.- -